# RESOLUTION NO. 2019-002

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROHNERT PARK AMENDING THE FISCAL YEAR 2018-19 CAPITAL IMPROVEMENT PLAN BUDGET AND RELATED ACTIONS

**WHEREAS**; on October 23rd, 2018, the City Council of the City of Rohnert Park adopted a Capital Improvement Project (CIP) budget amendment to add a Downtown Sewer Main Project (2018-40) and a State Farm Drive Traffic Improvement Project (2018-41) to the CIP Program; and

**WHEREAS,** work on each of these projects has resulted in a follow-up project and expanded scope that were not included in the approved five year Capital Improvement Program specifically or the recent CIP budget amendments; and

**WHEREAS,** a Downtown Water Improvement Project is a project to improve the existing water line in the downtown and surrounding areas; and

**WHEREAS,** staff has developed amendments to the Capital Improvement Program to support this new and expanded project, as outlined in Exhibit A, utilizing funding from the Water Capital Preservation Fund (Fund 531) and the Water Utility Fund (511); and

**WHEREAS,** this amendment requires review and approval by Council, some changes to the approved Fiscal Year 2018-19 project budgets, and an amendment to an existing consultant contract; and

**WHEREAS,** the Downtown Water Improvement Project (2018-42) and Hydrant Barrel Replacement Project (2018-09) is funded through the City's Water Capital Preservation Fund; and

**WHEREAS,** the Hydrant Barrel Replacement Project (2018-09) has surplus funding of $200,000; and

**WHEREAS,** the Downtown Water Improvement Project (2018-42) has a budget shortfall of $200,000; and

**WHEREAS**, the City's Water Capital Preservation Fund has the resources available to fund the proposed $200,000 in Fiscal Year 2018-19 for the Downtown Water Improvement Project by amending the Hydrant Barrel Replacement Project budget (2018-09);

**WHEREAS**, the staff expects to have available an additional $1,420,000 budgeted from the Water Utility Fund and $80,000 from the Water Capital Preservation Fund for the CIP Fiscal Year 19-20 to complete the water line improvements; and

**WHEREAS**, in accordance with the City's Purchasing Policy, GHD Inc., was selected, through a qualifications based process, to provide on-call design services for various City projects; and

**WHEREAS,** based on their qualifications and familiarity with the City's utility system, GHD Inc. was selected to perform predesign services for the Downtown Sewer Main project; and

**WHEREAS,** staff has received a proposal from GHD Inc. to complete full design services for both the Downtown Sewer Main and Downtown Water Improvement Projects, which includes a reasonable scope and fee for these services.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Rohnert Park does authorize and adopt an Amendment to the Five-Year Capital Improvement Program as outlined in Exhibit A.

**BE IT FURTHER RESOLVED**, that the Finance Director is authorized to transfer Water Capital Reserve funds from the Hydrant Barrel Replacement Project to the Downtown Water Main Project in the amount of $200,000.

**BE IT FURTHER RESOLVED** that the City Manager is authorized to execute GHD Inc. Task Order 2018-14 Amendment 1, in substantially similar form to Exhibit B, incorporated herein by reference, subject to minor revisions by the City Attorney or City Manager.

**DULY AND REGULARLY ADOPTED** this 8th day of January, 2019.

**CITY OF ROHNERT PARK**

Gina Belforte, Mayor

**ATTEST:**

JoAnne M. Buergler, City Clerk

ADAMS: Aye MACKENZIE: Aye STAFFORD: Aye CALLINAN: Aye BELFORTE: Aye
AYES: ( 5 ) NOES: ( Ø ) ABSENT: ( Ø ) ABSTAIN: ( Ø )

Resolution Exhibit A
Five Year Capital Improvement Program Amendment

| | | | | | | Five Year Capital Improvements Budget | | | |
|---|---|---|---|---|---|---|---|---|---|
| Project No | Project Name | Funding Sources | Proposed Total Project Funding | FY 2018-19 Adopted Budget | Proposed FY 2018-19 Budget Amendments | FY 2019-20 | FY 2020-21 | FY 2021-22 | FY 2022-23 |
| City Facilities and Recreation – Expansion/New | | | | | | | | | |
| 2018-42 | Downtown Water Improvement | Water Capital Fund, Water Utility Fund | $1,700,000 | | $200,000 | $1,500,000 | $0 | $0 | $0 |

Resolution Exhibit B

# AMENDMENT 1 TO TASK ORDER NO. 2018-14
# CITY OF ROHNERT PARK AND GHD, INC.

AUTHORIZATION OF ADDITIONAL ENGINEERING SERVICES FOR ROHNERT STATION SEWER IMPROVEMENTS PHASE 1

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**SECTION 1 – PURPOSE**

The purpose of this Amendment 1 to Task Order No. 2018-14 ("Amendment") is to authorize and direct GHD, Inc to proceed with the work specified in Section 2 below in accordance with the provisions of the MASTER AGREEMENT between the City of Rohnert Park ("City") and GHD, Inc ("Consultant") dated July 12, 2016.

**SECTION 2 – SCOPE OF WORK**

The additional items authorized by this Amendment are presented in Exhibit "A," attached hereto and incorporated herein.

**SECTION 3 – COMPENSATION AND PAYMENT**

Compensation shall be as provided in the MASTER AGREEMENT between the parties hereto referenced in SECTION 1 above. The additional cost for the additional services as set forth in SECTION 2 shall be actual costs (time and materials) based on Consultants' standard labor charges in accordance with the provisions of the MASTER AGREEMENT and as shown in Exhibit "B," attached hereto and incorporated herein, for an amount not-to-exceed $475,843.

Total compensation under Task Order No. 2018-14 and this Amendment shall not exceed $575,419.

**SECTION 4 – TIME OF PERFORMANCE**

The work described in SECTION 2 shall be completed by December 31, 2021 or as extended by the City Engineer or his/her designee.

**SECTION 5 – ITEMS AND CONDITIONS**

All items and conditions contained in the MASTER AGREEMENT for professional services between City and Consultant are incorporated by reference.

Approved this 8th day of January, 2019.

| **CITY OF ROHNERT PARK** | **GHD, INC.** |
|---|---|
| Darrin Jenkins, City Manager (Date) | Name: (Date) |
| Per Resolution No. 2019-___ adopted by the Rohnert Park City Council at its meeting on January 8, 2019. | Title: |
| **ATTEST:** | **APPROVED AS TO FORM:** |
| City Clerk | City Attorney |

December 17, 2018

Vanessa Marin Garrett, P.E.
City of Rohnert Park
Development Services
130 Avram Avenue
Rohnert Park, CA 94928

Our Ref: 11187329

**RE: Proposal for Engineering Services – Phase 2 – Downtown Infrastructure Improvements, Rohnert Park, CA**

Dear Vanessa:

GHD Inc. is pleased to submit this proposal and scope of work for the design and bid phases of the Downtown Infrastructure Improvements Project. The scope of work provided herein includes design and bid phase services for a new sewer main and relocation of an existing water main to serve planned development.

# Project Understanding and Background

The State Farm property located at the northeast corner of the intersection of State Farm Drive and Enterprise Drive is planned for development into a mixed use housing and commercial area, with construction activities planned to begin in Summer 2019. The proposed development is referred to herein as the Downtown Development (DD). The development will be served by public utilities, including sanitary sewer, potable water, and recycled water service from the City.

GHD completed Phase 1 of the project in December 2018. This first phase evaluated various alignment alternatives for a new 15-inch sewer main located between the proposed Rohnert Station development at the former State Farm property and the Eastside Trunk Sewer (ESTS) located south of Copeland Creek. The purpose of the new sewer main is to provide sewer conveyance for projected sanitary sewer flow from the development and alleviate peak flow hydraulic deficiencies in the existing sewer system in the project vicinity. A secondary benefit of the new sewer main is capture and conveyance of additional existing sewer connections along the selected sewer main alignment. Flow from those existing connections would also be conveyed to the ESTS, further alleviating peak flow hydraulic deficiencies in the existing sewer collection system.

The sewer main alignment selected in Phase 1 consists of approximately 3,600 linear feet (LF) of 15-inch diameter gravity sewer main from the development Point of Connection (POC), westerly in Enterprise Drive, then southerly in Commerce Boulevard, connecting to the ESTS at Avram Avenue. The sewer main crosses Copeland Creek to the north of Avram Avenue. An alternative alignment to consider during preliminary design development (i.e., 50 percent design effort) is the potential connection of the new sewer main to the existing 21-inch sewer main located west of Commerce Boulevard to the north of Copeland Creek. This variant to the selected alignment alternative eliminates the creek crossing and could be designed to alleviate peak flow hydraulic deficiencies in the existing sewer collection system.

Water main improvements consist of approximately 1,900 LF of 10-inch diameter pipeline replacement in State Farm Drive. The existing asbestos cement pipe (ACP) water main along State Farm Drive is shallow, with a portion located under existing redwood trees. Prior to the roadway rehabilitation of State Farm Drive, the City has requested the replacement of the main from just south of Rohnert Park Expressway to Enterprise Drive and east to a point of connection with the existing main.

### Quality Assurance / Quality Control (QA/QC)

GHD will perform QA/QC review of all deliverables by our QA/QC Manager and senior engineering and construction management staff (constructability review) on the project team. QA/QC review time is incorporated into the various project tasks.

# Scope of Work

We are pleased to provide this proposal to the City for professional services on the Phase 2 – Downtown Infrastructure Improvements. A detailed scope of work is provided below.

## Task 1 – Project Management

### 1.1 Project Management

GHD will provide project management services during the project. The following summarizes our Phase 2 project management activities:

- Project coordination with the City, project team, and stakeholders. Coordination will include the following three (3) project meetings, and additional progress conference calls as necessary to communicate key project issues as they develop during the course of the work. Meeting attendees will include staff from GHD, City, Downtown Development representatives, and other stakeholders as appropriate.
    - Review meetings (2) following submittal of the 50% and 90% submittals.
    - One additional review meeting during development of the 50% submittal to discuss project progress, confirm sewer and water alignments, sewer POC invert elevation and location, and permitting needs. The meeting will be combined with a site visit to focus on design considerations for the water main improvements, but may also cover review of the sewer main alignment.
- Project progress. Evaluate and track progress on scope, schedule, and budget. Prepare monthly project activity reports to be provided with each of our monthly invoices during the project. These reports will provide the City with a brief description of the activities completed during the previous month.

### Task 1 Deliverables

- Monthly invoices with progress reports
- Meeting agendas and notes

## Task 2 – Field Investigations

### 2.1 Site Visits

GHD staff will conduct detailed field visits as necessary for project scoping, detailed design, and to coordinate with City staff.

### 2.2 Field Survey

GHD will conduct detailed topographic survey of the project area for the sewer main alignment selected in Phase 1 and for the water main alignment and prepare a project base map for design purposes. Detailed topographic survey will supplement data obtained during Phase 1.

The following information will be referenced for the topographic survey: utility base mapping prepared during Phase 1 and available utility records from known utility purveyors.

Elevations will be in NAVD 88 based on existing benchmarks in the area. Coordinates will be California Coordinate System Zone 3. Elevation(s) for tie-in with the DD at its POC will be coordinated with the City and development team during design development.

Encroachment permitting and associated fees are not anticipated or included in project scope for topographic survey.

Field survey notes, including topographic survey notes will be kept on file at GHD. Topographic survey base mapping will be used for the preparation of various project deliverables and not provided as a separate deliverable.

### Task 2.2 Assumptions

- Topographic survey at locations with more traffic may necessitate nighttime / off-hours work and/or the assistance from the City for traffic control.
- This scope of services does not include boundary or record survey, setting of monuments and property corners.
- This scope of services does not include obtaining or review of title reports or other similar documents that would be used to define property and right-of-way boundaries.
- The effort included for this task assumes initial topographic survey of the project corridor and two follow up site visits during design development.
- Temporary and permanent easements are not required for the project. The Contractor will be responsible for securing temporary staging areas.

### 2.3 Office Survey

GHD will use the topographic information collected from the field survey and the noted reference information to prepare a project basemap. GHD will also send information request letters to various utility providers to submit record drawings delineating the location of utilities. Previously prepared utility base mapping will be provided to the utilities for reference; utilities may only provide information to augment what was provided for Phase 1. The basemap will be used by the design team to prepare various plan and profile drawings for the project. Utility maps will be kept on file at GHD. Electronic copies may be sent to the City upon request.

## 2.4 Positive Utility Verification

It is understood that information on existing utilities provided by utility owners may not be complete (for example, vertical location of certain utilities may not be available) and cannot be verified during design. Utility information provided by the owners of the utilities will be compared against information obtained during the field visits to approximate the location of the existing utilities on the plans.

GHD has subcontracted with Subtronic Corporation (Subtronic) to conduct positive utility verification (i.e., potholing) in selected locations throughout the project corridor. Subtronic and GHD will seek to verify the locations of critical and pressurized utilities (i.e., buried high voltage power lines, fiber optic lines or ducts, gas mains, water mains); however, the Contractor during construction may be required to verify locations and adjustments or relocation of existing utilities may be required. This scope of services includes vacuum excavation of up to 40 pothole locations to confirm underground utilities per furnished drawings. Potholes are assumed to be located in the roadway, in asphalt pavement. Potholing and associated backfill and restoration for concrete areas (i.e., pavement, curb/gutter/sidewalk/driveway) are not included in this scope of services. Locations will be backfilled with Class II aggregate and the pavement repaired with hot mix asphalt permanent patch. The pothole locations will be selected by GHD, though coordination with the City, at project kick-off (January 2019).

Subtronic will provide photographs and tabular data for field measurements at each pothole location. Potholing results will be integrated into the 50% design submittal.

Work is assumed to occur during daytime work hours and the average pothole depth is assumed to be six feet.

Caltrans encroachment permitting will be required for potholing within Caltrans right-of-way. City of Rohnert Park encroachment permitting will be required for potholing within City right-of-way. Task 3 includes this permitting effort.

# Task 3 – Geotechnical Investigations

### Task 3.1 Exploration, Engineering & Analysis

The objective of our geotechnical investigation is to investigate, evaluate, and understand the geology and geotechnical engineering properties of the site to provide geotechnical recommendations for sewer project design and construction. The geotechnical investigation will be performed in the responsible charge of a licensed Geotechnical Engineer. Services include the following:

1. We will review available published geotechnical and geologic data applicable to the project.
2. An Encroachment Permit will be obtained for all borings in City streets. Traffic control and temporary lane closures will be performed in general accordance with the 2014 California MUTDC. All boring locations will be marked in white paint and registered with underground Service Alert. The borings would also be permitted through the Sonoma County Environmental Health Department.
3. Exploration will include up to five exploratory borings to as deep as 35 feet along the sewer alignment and two borings up to 15 feet deep along the waterline alignment. Samples will be obtained immediately below the existing pavement section and approximately every five feet thereafter with Standard Penetration Test and Modified California samplers, driven with a 140-pound hammer. Cap the two trenchless borings for at least 30 minutes and perform a field test with a photo ionization detector (PID) for potential explosive gases.

Pavement sections will be measured and soils shall be field-classified in general accordance with ASTM D2488. The borings will be backfilled with cement grout and topped with cold asphalt patch.

4. GHD will geotechnical perform laboratory tests of the type and number as required to obtain sufficient information to prepare the geotechnical report, which shall state the standards used for the laboratory tests. The laboratory testing will include, as appropriate:
   a. Strength tests such as direct shear, unconfined compression
   b. Index Tests such as sieve analysis, hydrometer, Atterberg limits, moisture content, and dry density
   c. Corrosivity Tests, including sulfate, resistivity, chloride, pH, redox
5. Engineering analyses will be performed to support the design-level conclusions and recommendations for the proposed expansion. Analyses will include the following, as appropriate:
   a. Volume shrink/swell
   b. Dewatering volume
   c. Lateral earth resistance
   d. Soil parameters for flexible pipeline and thrust block design

**Task 3.2 Draft and Final Report**

1. A design-level geotechnical investigation report will be prepared for the project. The report will include the following:
   a. Description of physical properties and characteristics of the pavement section, subsurface soil, and groundwater
   b. A plan showing the locations of borings and log of borings
   c. Discussion of corrosivity of soils with respect to concrete and ferrous metals
   d. A summary of all laboratory and field test data
   e. Discussion of pertinent geotechnical factors (soil and groundwater) that could affect the design and construction of this project; and
   f. Conclusions and recommendations for the following:
      i. Impacts of questionable soils (expansive, compressible, resistant), if encountered, and mitigation
      ii. Soils corrosive to concrete and ferrous metals
      iii. Bedding, backfill, compaction, and moisture requirements for trench bedding and backfill
      iv. Volume shrink/swell
      v. Dewatering
      vi. Flexible pipeline deflection parameters
      vii. Impacts and viable trenchless construction methods

2. GHD's geotechnical team will work with the design team to confirm the geotechnical recommendations from the geotechnical investigation report are properly applied to the civil and design as well as incorporated into the plans.

### Task 3 Deliverables

- Draft and Final Geotechnical Investigation Report (electronic PDF transmittal).

### Task 3 Assumptions

- The City will waive fees for the Encroachment Permit
- Spoils from the borings will be placed back in the borings
- Access to the project site is provided to GHD for exploration
- Work hours will be weekdays between 7 am and 5 pm
- Services during bidding or construction are not included
- Wet weather may delay the schedule of field services

## Task 4 – Environmental Documentation and Permitting

### 4.1 CEQA Compliance Assistance

The proposed project is located within the boundaries of the Central Rohnert Park Priority Development Area Plan (PDA Plan). A programmatic-level Environmental Impact Report (Program EIR) was certified for the PDA Plan in 2015. The proposed project, which will include construction techniques that would avoid disturbance of riparian corridors, is anticipated to be found consistent with the PDA Plan and will be approved utilizing the PDA Program EIR. This task includes a limited number of hours for a GHD CEQA specialist to coordinate with the design team and the City on tiering from the PDA Program EIR. This would include meetings and conference calls, assisting with tiering checklist templates, and peer reviewing checklist and/or Mitigation Monitoring Program documentation to be prepared by the City.

### 4.2 Resource Agency Permitting

Trenchless construction techniques would be utilized to install the proposed pipeline beneath Copeland Creek, thereby avoiding work within the creek and disturbance to riparian habitat. The use of trenchless construction techniques would avoid working within areas that are under the jurisdiction of the Army Corps of Engineers and the North Coast Regional Water Quality Control Board. Therefore, this scope of work does not include Clean Water Action Section 401 or 404 environmental permitting applications.

Based on experience with similar pipeline projects, GHD anticipates that the trenchless construction beneath Copeland Creek will require of a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife. GHD will prepare a Notification of Lake or Streambed Alteration for the project, which will be submitted for City review. Upon receipt of City comments, GHD will finalize the Notification for submittal to the California Department of Fish and Wildlife and coordinate with the agency on project-related inquiries. This scope of work assumes that the City will provide payment for the Notification fee, which will be based on the estimated project cost.

### 4.3 Caltrans Encroachment Permitting

Based on review of available Caltrans right-of-way maps during project scoping, this scope of services assumes that encroachment permitting with Caltrans will not be required for planned geotechnical investigation and potholing field work for the trenchless crossing of Copeland Creek.

Encroachment permitting will be required for construction activities within Caltrans rights-of-way.

GHD will begin coordination with Caltrans for the construction contract at the 50% design development stage, and the construction encroachment permit (EP) application will be submitted at the completion of the 50% design development stage. The City will sign and/or authorize the permit application and provide fees associated with the permit (or fees will be waived by Caltrans). GHD will prepare traffic control plans that are required by Caltrans for the EP application. One resubmittal is anticipated for the construction EP. GHD and a City representative will meet with Caltrans to discuss the construction EP application. GHD will address and prepare a response to review comments from Caltrans to the encroachment permit application for the trenchless crossing of Copeland Creek as submitted by GHD at the 50% submittal stage.

The Caltrans EP for construction is anticipated to be received prior to bid advertisement. The selected contractor will use the City's EP as the basis for obtaining a double permit from Caltrans for construction.

## Task 5 – Prepare 50% Contract Documents

GHD will prepare preliminary plans that will be used as the basis for the CEQA and permitting processes, and preliminary discussion with the City of Rohnert Park. GHD will also prepare preliminary specifications, and a preliminary opinion of probable construction costs.

Preliminary plans will include plan and profile sheets for the sewer and water main alignments, preliminary details for the sewer and water main trench and manholes, typical road cross sections, and other preliminary information appropriate to define the scope of the project. Plans will show design intent, limits of work, and annotation for work items. Detailing for the various work items will generally not be included in the 50% submittal. Since geotechnical exploratory drilling and potholing activities are scheduled for January 2019, results may not be available for incorporation into the 50% plans. These plans will also be used as the basis for encroachment permit submittal to the City of Rohnert Park and Caltrans.

Preliminary specifications will include Division 2 specification sections; however, timing for receipt of the Draft Geotechnical Report may effect development of tunnelling, shoring, soil stabilization, and dewatering specifications. Those specification sections will be completed for the 90% submittal.

GHD will coordinate with the DD consultants to identify sewer and water connection points.

GHD will meet with the City following submittal of the 50% submittal to discuss the project findings to date. The goal of this meeting is to receive City comments and reach concurrence on the design approach for the project. City comments will be consolidated into one review response document. Comments will be reviewed by GHD and incorporated into the deliverables for upcoming project tasks.

### Task 5 Deliverables

- GHD will submit to the City three (3) hard copies (11x17) and one electronic copy (PDF) of the 50% plans, preliminary specifications, and preliminary opinion of probable construction costs. The trenchless

requirements will require site specific and project specific requirements in the following sections: (1) Shaft construction, (2) tunnel excavation method – HAB, (3) Steel casing, (4) Contact grouting, (5) Geotechnical instrumentation, (6) Backfill grout between carrier pipe and casing pipe, (7) Installation of carrier pipe in casing including casing spacers and bulkheads, (8) Review of carrier pipe material specification, (9) Review of dewatering specification – disposal and performance requirements, (10) Review of submittals, (11) Review of owner preferred terms, (12) Review of order of precedence.

- Provide draft calculations for jacking loads and hydro-fracture analysis
- Draft Geotechnical Investigation Report will be provided with 50% submittal.

## Task 6 – Detailed Design

Task 6 includes the preparation of plans, technical specifications, and engineer's opinion of probable construction costs for the new sewer and water main within one contract document.

### 6.1 Prepare 90% Contract Documents

Documents will be prepared for sewer and water improvements. The following provides a list of the anticipated 32 plan sheets for the project, which is subject to change to meet project needs:

- General, including survey control: 5 sheets
- Civil (pipeline plan and profile): 14 sheets
- Civil Details: 6 sheets (including standard plans, details, profiles, enlarged views, tunnelling) (tunnel details and ground monitoring details – 2 pages)
- Traffic handling/constraints plans: 7 sheets

GHD will prepare 90% plans using the project basemap prepared for the 50% submittal. The 90% plans will be based on comments and recommendations provided by the City for the 50% submittal. The 90% submittal will be submitted to the City for review.

It is assumed that the City will distribute 90% documents and return one consolidated comment review packages. This scope of services does include preparation of response documents for the City review.

Plans will be prepared at a scale of 1"=20' at 22"x34" (unless otherwise appropriate and/or approved by the City). Traffic handling/constraints plans will be prepared at a scale of 1"=40' at 22"x34" (unless otherwise appropriate and/or approved by the City).

Specifications for the 90% submittal will be formatted for consistency with the City's standard specifications. GHD will provide supplemental technical specifications.

The 90% submittal will also include an updated engineer's opinion of probable construction costs, as revised based on comments and recommendations provided by the City for the 50% submittal and GHD's findings for the preparation of the submittal.

GHD will meet with the City to discuss the 90% submittal review comments.

### Task 6.1 Assumptions

- Road rehabilitation outside of the trench section is not included in the project scope of services, except where the trench repair section is extended to adjacent surface features (i.e., gutter, lane lines) per City standards.
- Work associated with surface features affected by construction activities (i.e., paint and thermoplastic marks and legends, raised markers, valve covers) will be noted on the plan and profile sheets.
- Technical specifications will follow the CSI 16-division format.
- The City will provide GHD with its standard / front-end specifications in electronic format for use in preparing project specifications.
- The City will provide standard plans, drawings, figures, etc., to GHD in electronic format for use in preparing project plans.

### Task 6.1 Deliverables

- 90% full-size (22"x34") plans, front end and technical specifications, and 90% engineer's opinion of probable construction cost and technical memorandum for Basis of Estimate (6 hard copies and 1 PDF electronic copy).

## 6.2 Prepare 100% Contract Documents

Prepare 100% plans, specifications and engineer's opinion of probable construction costs. Revisions will be substantially based upon comments and recommendations provided by the City for the 90% submittal.

### Task 6.2 Deliverables

- 100% full-size (22"x34") plans, front end and technical specifications, 100% engineer's opinion of probable construction cost (3 hard copies and 1 PDF electronic copy).
- Final Geotechnical Investigation Report will be provided with 100% submittal, in order to address comments provided for the 90% submittal review.

## 6.3 Prepare Final Contract Documents

Prepare complete set of biddable contract documents and final engineer's opinion of probable construction costs. Revisions will be substantially based upon comments and recommendations provided by the City for the 100% submittal. This scope of services does not include any submittals subsequent to the Final Submittal.

### Task 6.3 Deliverables

- Final stamped/signed full-size plans (2 bond copies), stamped/signed ready specifications (2 paper copies), final engineer's opinion of probable construction cost (2 paper copies), and a CD electronic copy of the final plans, specifications (PDF for plans, Word for specifications, Excel for engineer's opinion of probable construction costs). The City is anticipated to use the electronic copy of the plans and specifications for reproduction of documents during the project bid phase.

## Task 7 – Bidding Phase Assistance

This scope of services assumes that the City will advertise and provide administration for the project bidding phase. GHD will provide support to the City as follows:

- GHD's project manager and project director will attend one (1) pre-bid meeting to field questions from interested parties. It is assumed that the City will prepare a written record of attendance and items discussed.
- Respond to questions during bid. GHD will respond to up to twenty (20) questions from plan holders and document the responses. A spreadsheet detailing RFI submittals, responses, and tracking will be maintained. Questions will be routed to GHD from the City during the bid phase.
- Prepare addenda. GHD will prepare technical information for the City's use to prepare addenda. This scope of services assumes that the City will prepare two (2) addenda during the bid phase.
- Prepare conformed construction documents. GHD will incorporate addenda into a conformed set of plans and specifications.

### Task 7 Deliverables

- Handwritten notes will be provided (scanned to PDF) for meetings.
- Responses to questions, addenda, and conformed construction documents will be provided in electronic format. The City will be responsible for preparing copies of the bid phase and contract documents as needed.

## Contingency

A 4 percent contingency is provided for this Scope of Services for additional services that may be required for the project (e.g., to address unforeseen field conditions or unanticipated traffic control requirements for geotechnical and potholing work, additional community outreach, significant changes in alignment, etc.). Use of the project contingency will be based on written authorization by the City to proceed.

## Assumptions

- Corrosion design is not included in this scope of services.
- Preparation of a SWPPP is not included in this scope of services. The contractor will be required to prepare and administer a SWPPP during the construction phase.
- Plans will include general information and notes regarding bypass pumping. Technical specifications will provide anticipated bypass pumping flow rates from the latest hydraulic model, as well as various requirements for the bypass pumping systems. The selected contractor will be responsible for preparing and submitting detailed bypass pumping plans and calculations.
- Dewatering water is assumed to be discharged to the existing sewer system. The latest hydraulic model will be used to determine the available capacity for the existing sewer system. If anticipated dewatering flow rates would exceed the existing sewer system capacity, then dewatering water may be discharged to the new trunk sewer. Planning, permitting, and design for discharge to the stormwater system are not included in this scope of services.

## Services Not Included

The following services are not included in the scope of work:

- Preparing additional Bid Documents or Contract Documents for alternate bids or prices requested by the City for the project or a portion thereof.
- Determining the acceptability of substitute materials and equipment proposed during the bidding when substitution prior to the award of contracts is allowed by the Bid Documents.
- Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.
- Construction phase services.
- Other services performed or furnished by GHD not otherwise provided herein for in the scope of services.

## City Responsibilities

In addition to other responsibilities of the City as set forth in the scope of services, the City shall at its expense:

- Advertise and administer the bidding and award phases of the project. The City will attend the pre-bid conference, bid opening, partnering/pre-construction conference, and other job related meetings.
- Contract and administer the buildability/constructability consultant and review process.
- Provide labor compliance and funding administration as required by project funding, permit requirements, or other project requirements not provided in GHD's scope of services.
- Provide GHD with the findings and reports generated by the entities providing services to the City.

## Project Team

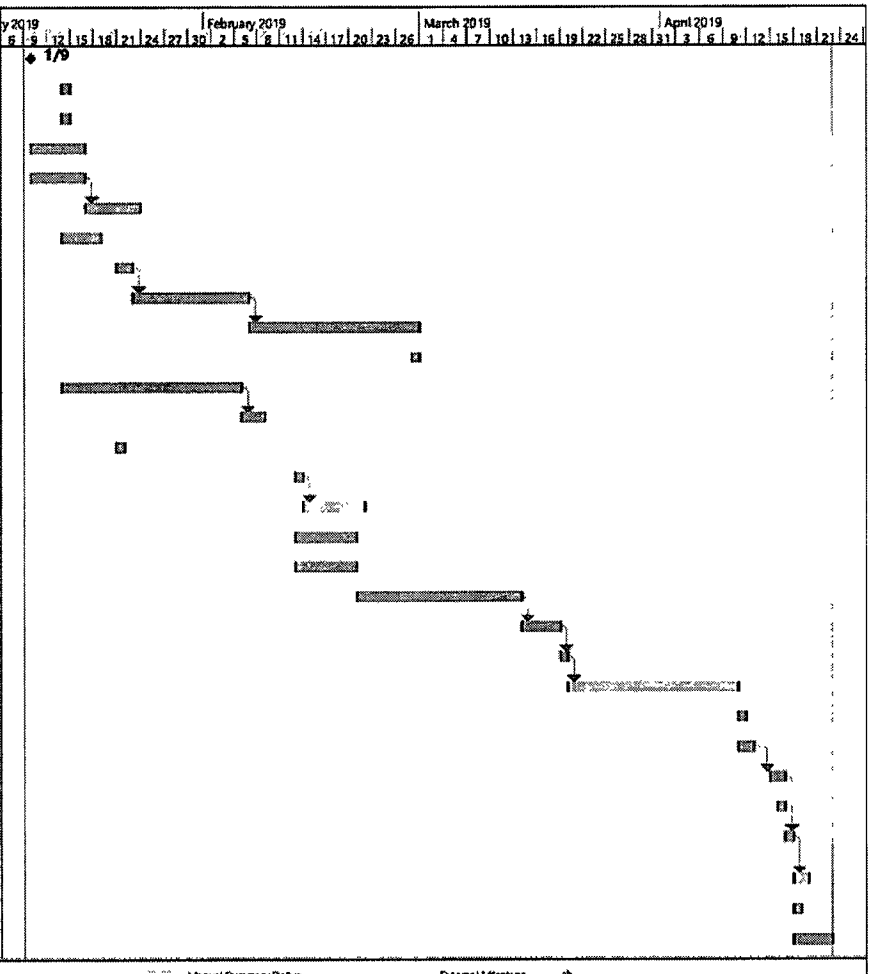
The following GHD Inc. personnel are assigned as project or technical leads for this project:

- Project Principal – Matt Winkelman, PE
- Project Manager – Steve Grupico, PE
- Quality Assurance / Quality Control (QA/QC) – Greg Watanabe, PE
- Civil Engineer – Mark Summers, PE
- CAD/Project Engineer – Brittany Moore, PE
- Tunnelling Engineer – Craig Camp
- Environmental Permitting – Brian Bacciarini
- Project Coordinator – Laura Bryan
- Geotechnical Engineer – Chris Trumbull, PE, GE
- Survey & Topographic Services – Richard Maddock, PLS
- Positive Utility Verification – Subtronic Corporation (sub)

## Project Schedule

Engineering services will commence upon issuance of Notice to Proceed for this scope of work, which is anticipated on January 9, 2019 following the City Council's meeting on the previous day. The estimated project schedule is presented below.

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | NTP | 1 day | Wed 1/9/19 | Wed 1/9/19 |
| 2 | Potholing EP | 1 day | Mon 1/14/19 | Mon 1/14/19 |
| 3 | Geotechnical EP | 1 day | Mon 1/14/19 | Mon 1/14/19 |
| 4 | Topo Survey | 5 days | Thu 1/10/19 | Wed 1/16/19 |
| 5 | Office Survey | 5 days | Thu 1/10/19 | Wed 1/16/19 |
| 6 | Update Utility Maps | 5 days | Thu 1/17/19 | Wed 1/23/19 |
| 7 | Potholing | 5 days | Mon 1/14/19 | Fri 1/18/19 |
| 8 | Geotechnical Field Investigation | 2 days | Mon 1/21/19 | Tue 1/22/19 |
| 9 | Lab Testing | 11 days | Wed 1/23/19 | Wed 2/6/19 |
| 10 | Engineering Analysis | 16 days | Thu 2/7/19 | Thu 2/28/19 |
| 11 | Geotechnical Draft Report | 1 day | Thu 2/28/19 | Thu 2/28/19 |
| 12 | 50% Design | 17 days | Mon 1/14/19 | Tue 2/5/19 |
| 13 | 50% QA/QC | 3 days | Wed 2/6/19 | Fri 2/8/19 |
| 14 | Caltrans Coordination | 1 day | Mon 1/21/19 | Mon 1/21/19 |
| 15 | 50% Submittal | 1 day | Wed 2/13/19 | Wed 2/13/19 |
| 16 | 50% City Review | 6 days | Thu 2/14/19 | Thu 2/21/19 |
| 17 | *CEQA Compliance Support* | *6 days* | *Wed 2/13/19* | *Wed 2/20/19* |
| 18 | Draft MND Section 1602 CDFW | 6 days | Wed 2/13/19 | Wed 2/20/19 |
| 19 | 90% Design | 15 days | Thu 2/21/19 | Wed 3/13/19 |
| 20 | 90% QA/QC | 3 days | Thu 3/14/19 | Mon 3/18/19 |
| 21 | 90% Submittal, include EP Submittals | 1 day | Tue 3/19/19 | Tue 3/19/19 |
| 22 | 90% City Review | 16 days | Wed 3/20/19 | Wed 4/10/19 |
| 23 | Receive Caltrans Comments | 1 day | Thu 4/11/19 | Thu 4/11/19 |
| 24 | 100% Design | 2 days | Thu 4/11/19 | Fri 4/12/19 |
| 25 | 100% QA/QC | 2 days | Mon 4/15/19 | Tue 4/16/19 |
| 26 | Section 1602 CDFW Approved | 1 day | Tue 4/16/19 | Tue 4/16/19 |
| 27 | 100% Submittal, incl. Section 160 CDFW, EP Submittals | 1 day | Wed 4/17/19 | Wed 4/17/19 |
| 28 | 100% City Review | 2 days | Thu 4/18/19 | Fri 4/19/19 |
| 29 | Caltrans EP Received | 1 day | Thu 4/18/19 | Thu 4/18/19 |
| 30 | Final Design | 3 days | Thu 4/18/19 | Mon 4/22/19 |




Project: RP Downtown Sewer Imp
Date: Mon 12/17/18

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Page 1

**GHD - PROJECT FEE ESTIMATING SHEET**

**Project Name:** Phase 2 - Downtown Infrastructure Improvements (Water)
**Client:** City of Rohnert Park
**Prepared by:** S Grupico
**Date:** December 17, 2018
**Reviewed by:** M. Winkelman
**Job Number** 11187329

| Task / Item | LABOR CATEGORY > / RATE > | Principal $265 /Hr | QA/QC $245 /Hr | Project Manager $195 /Hr | Sr. Proj Engr. $190 /Hr | Proj Engr. $145 /Hr | Env Lead $170 /Hr | Env Planner $135 /Hr | Geotech Lead $210 /Hr | Geotech Support $135 /Hr | LLS $175 /Hr | 2-Person Crew $320 /Hr | CAD / Graphics $145 /Hr | Project Coordinator $135 /Hr | TOTAL HOURS | *OTHER DIRECT COSTS | SUB Potholing (Subtronic) | SUB Drilling | TOTAL FEE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LABOR COSTS** | | | | | | | | | | | | | | | | **FEE COMPUTATION** | | | |
| **Task 1 Project Management (Phase 10)** | | | | | | | | | | | | | | | | | | | |
| 1 1 Project Management | | 4 | 2 | 14 | | 6 | | | | | | | | 3 | 29 | $1,374 | | | $6,929 |
| **Subtotal Task 1** | | 4 | 2 | 14 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 29 | $1,374 | $0 | $0 | $6,929 |
| **Task 2 Field Investigations (Phase 20)** | | | | | | | | | | | | | | | | | | | |
| 2 1 Site Visits | | | | | 5 | 5 | | | | | | | | | 10 | $60 | | | $1,735 |
| 2 2 Field Survey (PW) | | | | | | | | | | | | 28 | | | 28 | $840 | | | $9,800 |
| 2 3 Office Survey | | | | 1 | 1 | 2 | | | | | 12 | | 12 | | 28 | $168 | | | $4,683 |
| 2 4 Positive Utility Verification | | | 1 | 1 | 2 | 7 | | | | | | | | 1 | 12 | $72 | $27,600 | | $29,642 |
| **Subtotal Task 2** | | 0 | 1 | 2 | 8 | 14 | 0 | 0 | 0 | 0 | 12 | 28 | 12 | 1 | 78 | $1,140 | $27,600 | $0 | $45,860 |
| **Task 3 Geotechnical Investigation (Phase 30)** | | | | | | | | | | | | | | | | | | | |
| 3 1 Exploration, Engineering & Analysis | | 1 | | | | | | | 4 | 15 | | | | 1 | 21 | $4,502 | | $3,450 | $11,217 |
| 3 2 Draft and Final Reports | | 1 | 1 | | | | | | 3 | 5 | | | | 2 | 12 | $210 | | | $2,295 |
| **Subtotal Task 3** | | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 20 | 0 | 0 | 0 | 3 | 33 | $4,712 | $0 | $3,450 | $13,512 |
| **Task 4 Environmental Documentation and Permitting (Phase 40)** | | | | | | | | | | | | | | | | | | | |
| 4 1 CEQA Compliance Assistance | | | | | | | 7 | | | | | | | | 7 | $42 | | | $1,232 |
| 4 2 Resource Agency Permitting | | 1 | | | | | 5 | 6 | | | | | | | 12 | $72 | | | $1,997 |
| 4 3 Caltrans Encroachment Permitting | | 1 | 1 | 4 | 7 | 14 | | | | | | | 12 | 2 | 41 | $246 | | | $6,906 |
| **Subtotal Task 4** | | 2 | 1 | 4 | 7 | 14 | 12 | 6 | 0 | 0 | 0 | 0 | 12 | 2 | 60 | $360 | $0 | $0 | $10,135 |
| **Task 5 Prepare 50% CDs (Phase 50)** | | | | | | | | | | | | | | | | | | | |
| 5 1 Prepare 50% CDs | | 1 | 5 | 2 | 12 | 29 | | | | | | | 29 | 5 | 83 | $498 | | | $13,743 |
| **Subtotal Task 5** | | 1 | 5 | 2 | 12 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 5 | 83 | $498 | $0 | $0 | $13,743 |
| **Task 6 Detailed Design (Phase 60)** | | | | | | | | | | | | | | | | | | | |
| 6 1 Prepare 90% CDs | | 2 | 6 | 6 | 12 | 29 | | | 8 | | | | 29 | 7 | 99 | $1,269 | | | $17,754 |
| 6 2 Prepare 100% CDs | | 1 | 3 | 4 | 10 | 19 | | | | | | | 24 | 5 | 66 | $596 | | | $11,186 |
| 6 3 Prepare Final CDs | | 1 | 1 | 4 | 4 | 10 | | | | | | | 10 | 4 | 34 | $354 | | | $5,844 |
| **Subtotal Task 6** | | 4 | 10 | 14 | 26 | 58 | 0 | 0 | 8 | 0 | 0 | 0 | 63 | 16 | 199 | $2,219 | $0 | $0 | $34,784 |
| **Task 7 Bidding Phase Assistance (Phase 70)** | | | | | | | | | | | | | | | | | | | |
| 7 1 Bidding Phase Assistance | | 1 | 1 | 2 | 4 | 7 | | | | | | | 7 | 2 | 24 | $144 | | | $4,104 |
| **Subtotal Task 7** | | 1 | 1 | 2 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 24 | $144 | $0 | $0 | $4,104 |
| **PROJECT TOTAL** | | 14 | 21 | 38 | 57 | 128 | 12 | 6 | 15 | 20 | 12 | 28 | 123 | 32 | 506 | $ 10,447 | $ 27,600 | $ 3,450 | $ 129,067 |
| **Contingency (4%)** | | | | | | | | | | | | | | | | | | | $ 5,163 |
| **NOT TO EXCEED TOTAL FEE** | | | | | | | | | | | | | | | | | | | $ 134,230 |

*OTHER DIRECT COSTS include telephone, mileage, printing, photocopies and other miscellaneous direct expenses.

**GHD - PROJECT FEE ESTIMATING SHEET**

**Project Name:** Phase 2 - Downtown Infrastructure Improvements (Sewer)
**Prepared by:** S Grupico
**Reviewed by:** M. Winkelman
**Job Number** 11187329

**Client:** City of Rohnert Park
**Date:** December 17, 2018

| Task / Item | LABOR CATEGORY > / RATE > | Principal $265 /Hr | QA/QC $245 /Hr | Project Manager $195 /Hr | Sr. Proj Engr. $180 /Hr | Proj Engr. $145 /Hr | Env Lead $170 /Hr | Env Planner $135 /Hr | Tunneling Lead $230 /Hr | Tunnel Engineer $210 /Hr | Geotech Lead $210 /Hr | Geotech Support $135 /Hr | LLS $175 /Hr | 2-Person Crew $320 /Hr | CAD / Graphics $145 /Hr | Project Coordinator $135 /Hr | TOTAL HOURS | *OTHER DIRECT COSTS | SUB Potholing (Subtronic) | SUB Drilling | TOTAL FEE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Task 1 Project Management (Phase 10)** | | | | | | | | | | | | | | | | | | | | | |
| 1 1 Project Management | | 12 | 4 | 36 | | 16 | | | 14 | | | | | | | 7 | 89 | $1,734 | | | $19,399 |
| **Subtotal Task 1** | | 12 | 4 | 36 | 0 | 16 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 89 | $1,734 | | $0 | $19,399 |
| **Task 2 Field Investigations (Phase 20)** | | | | | | | | | | | | | | | | | | | | | |
| 2 1 Site Visits | | | | | 11 | 11 | | | | | | | | | | | 22 | $132 | | | $3,817 |
| 2 2 Field Survey (PW) | | | | | | | | | | | | | | 64 | | | 64 | $1,920 | | | $22,400 |
| 2 3 Office Survey | | | | 1 | 1 | 1 | | | | | | | 28 | | 28 | | 59 | $354 | | | $9,844 |
| 2 4 Positive Utility Verification | | | 1 | 3 | 6 | 17 | | | | | | | | | | 3 | 30 | $180 | $64,400 | | $69,420 |
| **Subtotal Task 2** | | 0 | 1 | 4 | 18 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 64 | 28 | 3 | 175 | $2,586 | $64,400 | $0 | $105,481 |
| **Task 3 Geotechnical Investigation (Phase 30)** | | | | | | | | | | | | | | | | | | | | | |
| 3 1 Exploration, Engineering & Analysis | | 1 | | | | | | | 1 | 1 | 8 | 36 | | | | 1 | 48 | $4,502 | | $8,050 | $19,723 |
| 3 2 Draft and Final Reports | | 1 | 1 | | | | | | 8 | 4 | 7 | 11 | | | | 3 | 35 | $210 | | | $5,924 |
| **Subtotal Task 3** | | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 5 | 15 | 47 | 0 | 0 | 0 | 4 | 83 | $4,712 | $0 | $8,050 | $25,647 |
| **Task 4 Environmental Documentation and Permitting (Phase 40)** | | | | | | | | | | | | | | | | | | | | | |
| 4 1 CEQA Compliance Assistance | | | | | | | 14 | | | | | | | | | | 14 | $84 | | | $2,464 |
| 4 2 Resource Agency Permitting | | 1 | | | | | 11 | 17 | | | | | | | | | 29 | $174 | | | $4,604 |
| 4 3 Caltrans Encroachment Permitting | | 1 | 2 | 8 | 17 | 34 | | | | | | | | | 28 | 6 | 96 | $576 | | | $15,921 |
| **Subtotal Task 4** | | 2 | 2 | 8 | 17 | 34 | 25 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 6 | 139 | $834 | $0 | $0 | $22,989 |
| **Task 5 Prepare 50% CDs (Phase 50)** | | | | | | | | | | | | | | | | | | | | | |
| 5 1 Prepare 50% CDs | | 3 | 11 | 6 | 28 | 67 | | | 56 | 80 | | | | | 67 | 11 | 329 | $1,974 | | | $45,829 |
| **Subtotal Task 5** | | 3 | 11 | 6 | 28 | 67 | 0 | 0 | 56 | 80 | 0 | 0 | 0 | 0 | 67 | 11 | 329 | $1,974 | $0 | $0 | $45,829 |
| **Task 6 Detailed Design (Phase 60)** | | | | | | | | | | | | | | | | | | | | | |
| 6 1 Prepare 80% CDs | | 4 | 14 | 14 | 28 | 67 | | | 38 | 54 | 8 | | | | 67 | 17 | 311 | $2,541 | | | $47,280 |
| 6 2 Prepare 100% CDs | | 2 | 7 | 8 | 22 | 61 | | | 34 | 34 | | | | | 56 | 13 | 237 | $1,622 | | | $36,181 |
| 6 3 Prepare Final CDs | | 1 | 3 | 8 | 12 | 22 | | | 8 | 8 | | | | | 22 | 8 | 92 | $702 | | | $14,850 |
| **Subtotal Task 6** | | 7 | 24 | 30 | 62 | 150 | 0 | 0 | 80 | 96 | 8 | 0 | 0 | 0 | 145 | 38 | 640 | $4,865 | $0 | $0 | $98,311 |
| **Task 7 Bidding Phase Assistance (Phase 70)** | | | | | | | | | | | | | | | | | | | | | |
| 7 1 Bidding Phase Assistance | | 1 | 1 | 4 | 8 | 17 | | | 8 | 8 | | | | | 17 | 6 | 70 | $420 | | | $10,818 |
| **Subtotal Task 7** | | 1 | 1 | 4 | 8 | 17 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 17 | 6 | 70 | $420 | $0 | $0 | $10,818 |
| **PROJECT TOTAL** | | 27 | 44 | 88 | 133 | 313 | 25 | 17 | 167 | 189 | 23 | 47 | 28 | 64 | 285 | 75 | 1,525 | $ 17,125 | $ 64,400 | $ 8,050 | $ 328,474 |
| **Contingency (4%)** | | | | | | | | | | | | | | | | | | | | | $ 13,139 |
| **NOT TO EXCEED TOTAL FEE** | | | | | | | | | | | | | | | | | | | | | $ 341,613 |

*OTHER DIRECT COSTS include telephone, mileage, printing, photocopies and other miscellaneous direct expenses